



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,387	10/17/2005	Agnes Dutron	VANM262.001APC	8653
20995 7590 11/14/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER BADR, HAMID R	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 11/14/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No. 10/527,387	Applicant(s) DUTRON ET AL.	
	Examiner HAMID R. BADR	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Objections to Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4, 6, 20 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Since the microorganism(s) is/are essential to the claimed invention it must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. If the microorganism(s) is/are not so obtainable or available, the requirements of 35 USC 112 may be satisfied by deposit(s) of the microorganism(s). The specification does not disclose a repeatable process to obtain the microorganism(s) and it is not clear from the specification or record that the microorganism(s) is/are readily available to the public.

Art Unit: 1794

This rejection may be overcome by establishing that the each microorganism identified is readily available to the public and will continue to be so for a period of 30 years or 5 years after the last request or for the effective life of the patent, whichever is longer, or by an acceptable deposit as set forth herein.

If the depository is made under the terms of the Budapest Treaty, then an affidavit or declaration by applicants, or a statement by an attorney of record over his/her signature and registration number, stating that the specific strain has been deposited under the Budapest Treaty and that the strain will be irrevocably and without restriction or condition released to the public upon the issuance of a patent, would satisfy the deposit requirement made herein.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposit meets the criteria set forth in 37 CFR 1.801-1.809, applicants may provide assurance of compliance by an affidavit or declaration, or by a statement by an attorney over his/her registration number, showing that,

- (a) during the pendency of the application, access to the invention will be afforded to the Commissioner upon request;
- (b) all restrictions upon availability to the public will be irrevocably removed upon the granting of the patent;
- (c) the deposit will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the effective life of the patent, whichever is longer; and,
- (d) the deposit will be replaced if it should ever become inviable.

The specification must also state the date of deposit(s), the number(s) granted the deposit(s) by the depository and the name and address of the depository.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-20, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuglsang et al. (WO 02/19828; hereinafter R1) in view of Collins et al. (2002, A novel family 8, functional and physicochemical characterization; hereinafter R2) and Olesen (US 6,110,508).

4. R1 discloses a composition comprising one or more enzymes and also discloses a method for improving one or more properties of a dough, also a method for preparing a baked product and to a dough and/or a baked product produced thereby. (Abstract)

5. R1 discloses the incorporation of carbohydrases including xylanases, oxidoreductase, amylases, proteases, lipases to the composition for baking purposes (page 10, lines 1-37 and page 11, lines 1-37). It is noted that α -amylase is a fungal amylase from *Aspergillus oryzae*. To support this position, the applicant is referred to US patent number 6,110, 508 for the details of fungal amylase in baking (Col. 5, line 64 to col. 6, line 7).

Art Unit: 1794

6. R1 discloses the role of amylases to standardize the flour from the view point of amylolytic activity. Amylases and pentosanases generally provide sugar for the yeast fermentation, improve the bread volume, retard retrogradation (maintain crumb softness) and decrease the staling rate and stickiness that results from pentosan gums (page 12, lines 5-11).

7. R1 discloses that fungal α -amylases may be used to improve the bread volume and to provide a good and uniform structure of the bread crumb. (page 12, lines 22-24).

8. R1 discloses that enzyme preparations containing a number of pentosanase and hemi-cellulase activities can improve the handling and stability of the dough, improve the freshness, the crumb structure and the volume of the bread. (page 12, lines 33-36).

9. R1 teaches combining α -amylase and hemicellulase in a dough composition. In a particular embodiment the hemicellulase is a pentosanase such as xylanase. (page 13, lines 6-10). The xylanase is preferably of microbial origin e.g. derived from bacteria or fungi.

10. R1 gives an example where an encapsulated xylanase is used in baking. Other ingredients include water, flour, yeast, sugar, salt, ascorbic acid. The encapsulated enzyme was dispersed in water. The ingredients are combined and the dough is mixed (page 26, Example 3 to page 27 line 2). Other ingredients, including gluten, may also be added to the dough (page 22, lines 24-37).

11. R1 discloses the stabilizing or protective agents that can be used with enzymes including organic acids, inorganic salts, sugars etc. (page 21, line 31—page 22, line 7)

Art Unit: 1794

12. R1 is silent regarding xylanase from glycoside hydrolases Family 8 as presently claimed.

13. R2 discloses xylanase enzyme belonging to family 8. The xylanase disclosed hydrolyses xylan to xylotriose and xylotetraose and is most active on long chain xylo-oligosaccharides. (Abstract).

14. The xylanase disclosed by R2, hydrolyzes with inversion of configuration. The source of the enzyme is *Pseudoalteromonas haloplanktis* (Abstract).

15. Claims 5-6, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuglsang et al. (WO 02/19828; hereinafter R1) in view of Collins et al. (2002, A novel family 8, functional and physicochemical characterization; hereinafter R2), Olesen (US 6,110,508), and JP 2001-245665 (hereinafter R3, Machine Translation).

16. R1 and R2 are silent regarding *Bacillus halodurans* as the enzyme source.

17. R3 discloses a xylanase from *Bacillus halodurans*. (page 9, lines 1-2).

18. Regarding other sources of xylanase such as *Bacillus halodurans* it would be obvious that the xylanase can be used in baking compositions as disclosed by R1. It would also be obvious that carriers such as powders, granules, liquids including cell extract, cell free extract and purified enzyme as presently claimed can be used in baking composition. R1 for instance uses the encapsulated enzyme (granule).

19. R1 specifically gives the details of the effects of xylanase on rheological properties of the prepared dough as well as volume increase and texture improvements of the baked bread. Therefore, the increase in the loaf volume is a known phenomenon

Art Unit: 1794

when xylanase is used. Cutting the surface of the dough is a known process in preparation of breads such as French baguette. The dimensions of the surface cut obtained in bread doughs containing xylanase will be intrinsic to such breads.

20. R1 and R2 disclose all of the features of the presently claimed invention, and R3 discloses a new source of xylanase, therefore it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use xylanase in dough compositions in order to improve the rheological properties of the dough and the resulting baked bread including loaf volume increase as taught by R1 and replace the xylanase source with the source as disclosed by R3. One would have done so to introduce a new source of xylanase to an already known art. Absent any evidence to contrary and based on the teachings of the cited references, there would be a reasonable expectation of success in using the new source of xylanase.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-T 5:00 to 3:30 (Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr
Examiner
Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794